872 National Press Building Washington 4, D.C. March 13, 1961

Dr. Joshua Lederberg Department of Genetics Stanford University Palo Alto, California

Dear Dr. Lederberg:

George Derbyshire of the Space Science Board has suggested that I write to you. Presently, I am researching an article on the place of basic biological research in outer space exploration and experimentation.

I have listened to stereophonic controversy on the past activities and efforts to put biology in a satellite. Those at one ear say the biologists have been frozen out of the space program; that NASA has defined rather narrowly what is meant by biological research and unless an experiment is directly related to "man in space" it will not be supported; we have yet to launch a bio-satellite; and the pressures of the engineers 9 ("who own and operate space efforts") have kept biologists out of the picture.

Those at the other ear charge that biologists have failed to come up with experiments that cannot be performed in earthly laboratories; biologists have not wanted to perfect telemetry for biological experiments; biologists are not doing their homework (particularly true of biological clocks) on earth before clamoring for the use of space vehicles.

I am certain reality is somewhere between these extremes. What I would like to be able to do is write an article saying that with Project Mercury about to get off the ground (hopefully) it is now time for us to consider a long-range program of fundamental biological research using the tools of space science. It is my impression that no such program exists today; that there is need for programming; and there are experiments (as you outline in Chap. IX of "Science in Space")

unrelated to man in space directly, but of paramount importance to biological research.

I would appreciate your comments. Specifically, do you think biologists have been denied the use of space vehicles for their experiments? Is there need for a national program in the biological sciences and space research? If so, can this be best achieved through NASA, the Space Science Board, or an independent national facility for this purpose? (I am somewhat puzzled that there is seemingly little research on the problems of man in an extraterrestial environment from the basic biological point of view -- what happens to man in a gravity free environment, rhythmically, etc.)

By way of introduction I was a news editor of Science Service for four years and then a Nieman Fellow at Harvard University. Presently I am a full-time, free-lance writer based here in Washington and an editorial consultant to the National Academy of Sciences. I have been published in <u>Daedalus</u>, <u>The Saturday Review</u>, <u>Harper's</u>, <u>The Economist and Think</u>.

I will appreciate any help you can offer in presenting a balanced and just article on biology and outer space, a topic I think has been relatively unpublicized.

Sincerely yours,

Howard Simous

Howard Simons

P.S. -- I am enclosing a stamped, self-addressed envelope for your convenience.

H.S.